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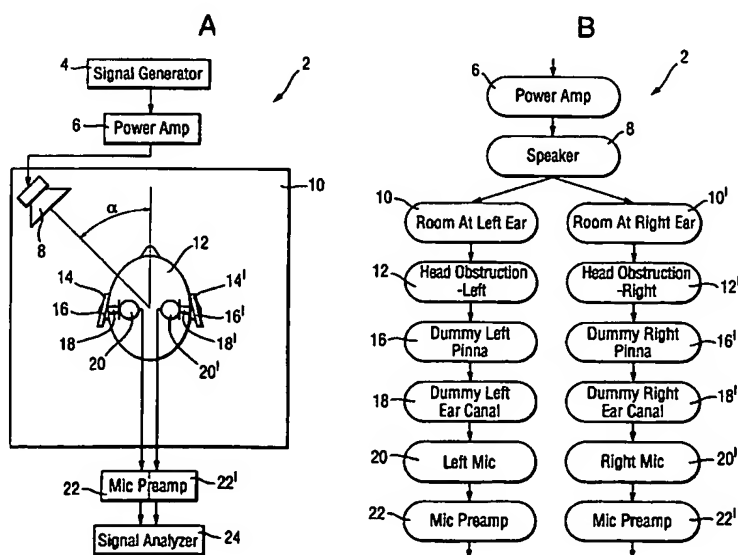
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- (71) Applicant (*for all designated States except US*): **BE4 LTD.** [IL/IL]; Science Building No. 1, Plaut Street 10, Rabin Science Park, 76122 Rehovot (IL).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **COHEN, Yuval** [IL/IL]; Hashitim Street 7, 23028 Migdal Haemek (IL). **BAR ON, Amir** [IL/IL]; Weizman Street 25, 76282 Rehovot (IL). **NAVEH, Giora** [IL/IL]; Moskovitch Street 35, 76468 Rehovot (IL). **LEVY, Haim** [IL/IL]; Zifman Street 20, 43220 Ra'anana (IL).
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(54) Title: A METHOD AND SYSTEM FOR SIMULATING A 3D SOUND ENVIRONMENT



(57) Abstract: The invention provides a method for simulating a 3D sound environment in an audio system using an at least two-channel reproduction device, the method including generating first and second pseudo head-related transfer function (HRTF) data, first using at least one speaker and then using headphones; dividing the first and second frequency representation of the data or using a deconvolution operator on the time domain representation of the first and second data, or subtracting the cepstrum representation of the first and second data, and using the results of the division or subtraction to prepare filters having an impulse response operable to initiate natural sounds of a remote speaker for preparing at least two filters connectable to the system in the audio path from an audio source to sound reproduction devices to be used by a listener.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/IL 02/00158

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 H04R5/033 H04S1/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04S H04R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 920 904 A (BLAUERT JENS ET AL) 18 November 1975 (1975-11-18) column 5, line 49 - column 6, line 48 column 7, line 33 - line 49; figure 10 column 8, line 18 - line 43 abstract -----	1-7

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax (+31-70) 340-3016

Authorized officer

Lindberg, P

INTERNATIONAL SEARCH REPORT

Information on patent family members

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